Academic Fora

FULL PAPER PROCEEDING
Multidisciplinary Studies
Available online at www.academicfora.com

Full Paper Proceeding BESSH-2016, Vol. 48- Issue.5, 14-20

ISBN 978-969-670-114-9

BESSH-16

THE RELATIONSHIP OF MARITAL ADJUSTMENT AND SEXUAL FUNCTION WITH PSYCHOLOGICAL FACTORS AFFECTING TREATMENT IN INFERTILE WOMEN

AKRAM KARAMI DEHKORDI[1*], MASOUMEH KARAMI DEHKORDI[2], ZIBA RAISI DEHKORDI[3]

[1,3]Shahrekord University of Medical Science, Shahrekord, Iran, [2]Shahrekord Education Organization, Charmahal Bakhtiari, Iran

Keywords:
Sexual Function
Marital Adjustment
General Health
Mental Health
Infertility

Abstract. Infertility is one of the most importantissues of reproductive health that has prominent effects on psychological and social aspects of couple's life. Infertility causes women's concern about their sexual attractiveness and also their physical and mental health, It is even possible that using assisted reproductive technologies have negative effects on women's feelings of the sexual values and marital relationships. This study therefore aimed to investigate the relationship of marital adjustment and sexual function with psychological factors affecting treatment in infertile women in 2013 in Mashhad, Iran. This correlational study was performed on 130 infertile women referred to Montaserie Infertility Research Center, Mashhad who selected using convenient sampling. Research tools were consisted of demographic questionnaires including personal and infertility-related information, and valid and reliable ROSEN Female Sexual Function Index (FSFI),Spanier Marital Adjustment Scale(DAS) and Goldbergand Hillier General Health Questionnaire, which were completed by the subjects. Data analysis was carried out by SPSS software using t-test,one way ANOVA, Spearman and Pearson correlation tests. The mean score of awareness of infertility and the length of infertility treatment were 5.24±4.12 and 4±3.95 years, respectively. The cause of infertility in 46.9% was a female factor and in 38.7% a male factor. General health in 49.2% of the infertile women were good. 54.6% of the infertile women had poor sexual function and 76.9% had high maritaladjustment. There was a direct correlation between sexual function and marital adjustment with general health in infertile women ($P<0.001$).A significantrelationship was also seen between sexual function and spouse accompany during treatment ($P<0.05$). Also a direct correlation was found between marital adjustment and being hopeful to treatment success and also spouse accompany during treatment in infertile women ($P<0.05$). The findings showed that infertile women with improved sexual function and good marital adjustment will have better mental health and are more hopeful toinfertility treatment . These results can be incorporated in planning of training and counseling programs, specially for infertile women who suffer from psychological disorders.

INTRODUCTION

Of problem that cause to worry women is infertile (1). World hygiene organization known preventing infertile and treating it is of fertile hygiene (1). Infertile frequency is between 5 to 50 percents. Infertile is having 40% female cause, 40% male cause and 20% male and female cause or its unknown (2).

Infertile could have different social mental effects and results. This problem cause to crisis in couples as they doubt in their abilities and qualities (3-4).

The researchers found spending time is accompanied with worried feelings and in comparison with men, women is endangering different mental harms. These women are worrying about remarriage, divorce. Fearing vague futurefollowing failure in infertile treatment and its results is annoyingto some infertile women. Therefore, some women might attend to theirbody appearance and beauty. Besides, infertile womenare hoping to become pregnant because of performing reorganization and

*Corresponding author: Akram Karami Dehkordi
E-mail: karami675@yahoo.com

Peer-review under responsibility of the Scientific & Review committee of BESSH-2016.

treatment methods to treat infertile, so it's possible to attend to their sexual attractions more than before and have the best marriage relationship with their husbands (5).

Marriage relationships are a variable process that is coming into existence with marriage and sets of four aspects of couple function in their life are including: 1) Dyadic satisfaction,2) Dyadic Cohesion, 3) Dyadic Consensus and 4) Affection Expression (6-8). the couples that have consensus with each other is averagely satisfying from marriage relationship,they like their partner habits, they enjoy with their partner's family and friends and they solve the problems with each other (9). Especially when they interest in their husband and they made their life based on understanding, possibility of outbreak psychological problems has a significant reduce (10). The studies indicate 75% of climates to psychologists and psychiatrists suffer marriage disagreement (11). Natural sexual function is the first degree of marriage life (12). Sigmund Freud as a founder of analysis mental theory knew Sexual desire is a natural and physiological affair that Sexual desire is the basic needs of human. William H. Masters and Virginia E. Johnsonare the first experts that studied sexual behaviors of human systematically. (13) One of the newest theories of sexual function is relating to R. Rosenand et al that determine six subscales including Sexual desire, sexual excitement, vaginal moisture, orgasm, painful intercourse, and sexual satisfaction (13-14).

Abraham Maslow, humanistic theorist (1960) believes dissatisfaction of these needs damages to loftiness severely. In a healthy marriage, existence of a good sexual relationship in a way that cause to provide the satisfaction of two sides, has very important and main role in success of family focus resistance (13).

Inattention to sexual instinct in human lead to exist disorders of marriage relationships. As it was seen cause of 80% of marriage differences is sexual dissatisfaction of couples (15). Sexual desire is product of mind more than body and it could be under the effect of different incomes including fertile, infertile and Dyadic Consensus. Many fertile and infertile couples image pregnancy is the production of sexual relationship, so if the pregnancy doesn't occur, thesexual relationship is like a barren relationship in mind of individuals. But some of couples result sexual relationship could be a response to their natural need and they don't believe the relationship to become pregnant (5).

Basson and et. al (2004) indicated 25 to 63% of public population has sexual problems (16). Chinese researchers (2007) reported about the situation of sexual function subscales in women that one third women has low Sexual desire, one forth women has orgasm problem, one fifth women has a problem related to vaginal moisture and one fifth women has a sexual satisfaction (17).

In some couples evaluating infertile and using helping fertile methods, might have a negative effect on body image of women and her feelings about her sexual value (18), this one cause to distance between fertile young couples with regarding to interesting in each other mentally (25). LatifneZhad (2009) showed if infertile women has a positive and optimistically viewpoint, this matter lead to close the couples to each other more and it causes to womenexperience satisfaction of marriage relationships with her husband's (19). Khodakarami also results relationships of couples in infertile women could be in two directions of poor relationship and close relationship establishment. Sometimes it's possible cause to positive variations in relationships of couple and understanding. In these conditions they feel to support each other and they prefer to talk with each other alone. They support each other for problems and treating and they understand importance of their joint life (5).

This study therefore aimed to investigate the relationship of marital adjustment and sexual function with psychological factors affecting treatment in infertile women in 2013 in Mashhad, Iran.

METHODS AND MATERIALS

This correlational study was performed on 130 infertile women referred to Montaserie Infertility Research Center, Mashhad who selected using convenient sampling.

The sample size calculation was performed by investigating a pilot study on 20 eligible infertile women using correlation formula based on the correlation coefficient between marital and sexual function adjustment using 95% confidence interval and a power of 80%, and it was estimated that a sample size of 130. The inclusion criteria were included in the study: Being in the age range of 20–40 years, having the ability to read and write, being able to talk in Persian ,not being pregnant after a minimum of 1 year of unprotected sex, and having primary infertility confirmed. The exclusion criteria were: Having a history of medical illnesses or any physical, mental, being under treatment due to sexual dysfunction, having a mental illness, and drug use or alcohol consumption.

Research tools were consisted of demographic questionnaires including personal and infertility-related information, and valid and reliable Spanier Marital Adjustment Scale(DAS) ,ROSEN Female Sexual Function Index (FSFI), and Goldbergand Hillier General Health Questionnaire, that the subjects completed them. in 1976, Spanier designed Marital adjustment scale questionnaire. This questionnaire was used to assess four subscales of adjustment including marital satisfaction, marriage coherence, agreement in marriage, and manifestation and expression of couples' feelings and emotions. It had 32 items with a maximum score of 151 and a minimum score of zero. in this scale, scores of less than 100 indicated lower marital adjustment and scores above 100 meant greater marital adjustment.

Based on the female sexual function index questionnaire, Sexual function was evaluated. in 2000 by Rosen and colleagues developed this questionnaire including 19 items and six subscales including libido, sexual excitement, vaginal moisture, orgasm, painful intercourse, and sexual satisfaction. The scores considered were: 1–5 points for items regarding the scope of libido, 0–5 points for sexual excitement, vaginal moisture, painful intercourse, and orgasm, and zero or 1–5 points for items regarding sexual satisfaction. Zero score showed a lack of sexual activity during the past 4 weeks. The cut‐off score of this questionnaire was 28, and for the total scale, the minimum score and the maximum was considered 2 and 36 respectively. Generally, higher scores showed better sexual function.

Questionnaire including 28 items of General Health Questionnaire: this questionnaire provided by Goldberg and Hillier in 1979 which is including 28 items and it assess four aspects of body symbols (7 items), sleeplessness and stress symbols (7 items), social function disorder (7 items) and depression symbols (7 items). Research unit express its situation about sick or boring in response to questionnaire as (no, little, high, so high). Each option has 0, 1, 2, 3 score respectively. In this test the highest score is 84 and the lowest one is zero and cut-off point is 23. The subject is having score of 23 and lower healthy and more than it doubt to mental problems. Also the lower score show the best public healthy (20-21).

All questionnaires were determined by content validity method. The reliability of public healthy questionnaire was emphasized by Nourbala and et. al using test- test correlation coefficient with time distance of a week and coefficient of 85% in 2009 (20).The reliability of marriage consensus and sexual function questionnaire was studied by the internal consistency reliability method by calculating the Cronbach's alpha coefficient with α= 0.92 and α= 0.79 respectively.

For data collection, after obtaining the necessary permission from the Montaserieh Centre officials and after expressing the objectives and methods to the subjects, the researchers obtained the consent of participants and reassured them about confidentiality of the information; they were explained that their participation in the investigation was completely voluntary and they could withdraw from the study whenever they wanted. Analyzing data was performed using SPSS software version 15.5. Description of data was carried out using frequency tables, graphs and mean indicators, median and standard deviation. To statistical analysis, the followings tests were used for: to determine the relationship among the normal and abnormal quantity variables, Pearson and Spearman correlation coefficients were used. for all tests ,the significance level was at 0.05.

RESULTS

The mean age was 27 ± 4.58 years in infertile women. Ninety‐eight subjects (75.4%) were housewives. In terms of job categories of infertile women, 19 participants (59.4%) were involved in cultural–educational majors and other occupational categories like medical sciences, technical, and engineering. Thirty‐eight subjects (29.2%) had university degree, 43 participants (33.1%) had high school education, and the other women had primary and middle school education. Forty‐seven (36.2%) infertile women's husbands were self‐employed, 40 (30.8%) husbands were employees, and others were either workers or unemployed. One hundred and six (81.5%) infertile participants lived only with their respective partner in one place and 106 (79.2%) women lived in the town. In terms of residence status, 53 (40.8%) subjects had a private home and 49 (37.7%) had a rental property. Results of this study indicated that 99 (76.2%) infertile subjects had social and artistic outdoor activities (other than their permanent jobs).

The mean terms of knowing about their infertility was 5.24 ± 4.12 years and the mean time of the infertility treatment was 4.1 ± 3.95 years. The cause of infertility in 61 subjects (46.9%) was female factor, in 49 subjects (37.7%) was male factor, and in the remaining was a combination of male and female factors or unknown. Forty‐nine participants (38.0%) were affected by sperm disorders and 43 subjects (33.3%) with ovulation disorders. In addition, 74 (56.9%) infertile subjects were quite promising about the success of their treatment and 100 (76.9%) subjects were accompanied by their husbands in the process of infertility treatment. One hundred and sixteen (89.2%) subjects and 115 (88.5%) husbands had a great desire to have children.

TABLE 1
FREQUENCY DISTRIBUTION OF INFERTILE WOMEN BASED ON HOPING SUCCESS OF TREATMENT, SPOUSE (PARTNER) ACCOMPANIMENT, TENDENCY OF WOMEN TO HAVING CHILD, TENDENCY OF HUSBANDS TO HAVING CHILD

Percent	Numbers	Variables
hoping success of treatment		
56.9	74	Yes
39.3	51	So-so
3.8	5	No

100.0	130	Total
spouse accompaniment		
76.9	100	Yes
20	26	So-so
3.1	4	No
100.0	130	Total
tendency of women to having child		
89.2	116	High tendency
10.8	14	no difference
100.0	130	Total
tendency of husbands to having child		
88.5	115	High tendency
10/0	13	No difference
1.5	2	non tendency
100.0	130	Total

The mean score of marital adjustment and sexual function were 113.8 ± 19.73 and 27.23 ± 3.8. The mean score of general health was 24.78±10.1 in infertile women.

The mean score of awareness of infertility and the length of infertility treatment were 5.24±4.12 and 4±3.95 years, respectively. General health in 49.2% of the infertile women were good. 76.9% had high marital adjustment and 54.6% of the infertile women had poor sexual function.

There was a direct correlation between sexual function and marital adjustment with general health in infertile women (P<0.001). A significant relationship was also seen between sexual function and spouse accompany during treatment (P<0.05). Also a direct correlation was found between marital adjustment and being hopeful to treatment success and also spouse accompany during treatment in infertile women (P<0.05).

TABLE 2

MARITAL ADJUSTMENT WITH SEXUAL FUNCTION SUBSCALES IN INFERTILE WOMEN

Marital Adjustment		**Variables**	
Test Results			
P	**Correlation coefficient (*r*)**		
0.075	0.156	Sexual desire	**Sexual function**
*0.000	0.38	Sexual arousal	
*0.004	0.25	Vaginal moisture	
*0.000	0/415	Orgasm	
*0.000	0/426	Sexual satisfaction	
*0.001	0.3	Dyspareunia	
*0.000	0.572	Overall result	

TABLE 3
MARITAL ADJUSTMENT WITH PUBLIC HEALTH SUBSCALES IN INFERTILE WOMEN

Marital Adjustment Test Results		Variables	
P	Correlation coefficient (*r*)		
*0.001	-0.3	**Body symbols**	**Public health**
*0.000	-0/337	**Sleeplessness and stress symbols**	
*0.002	-0.263	**Social function disorder**	
*0.000	-0.37	**Depression symbols**	
*0.000	-0.42	**Overall result**	

TABLE 4
SEXUAL FUNCTION RELATIONSHIP WITH PUBLIC HEALTH SUBSCALES IN INFERTILE WOMEN

sexual function Test Results		Variables	
P	Correlation coefficient (*r*)		
*0.001	-0.3	**Body symbols**	**Public health**
*0.000	-0.337	**Sleeplessness and stress symbols**	
*0.002	-0.263	**Social function disorder**	
*0.000	-0.37	**Depression symbols**	
*0.000	0.42	**Overall result**	

DISCUSSION

The findings showed that infertile women with improved marital adjustment and good sexual function will have better mental health and are more hopeful toinfertility treatment.

Naebinia (2011) in his/her study based on <investigating dependant style of adults to their parents with sexual function disorder in women> results that there is a positive relationship between marriage satisfaction and all six subscales related to it. Also there is a significant and negative relationship between depression and sexual function (22).Klik (2007) indicated sexual function has a direct effect on marriage consensus of women (23). Aliakbari Dehkordi in his/ her study with aim of <sexual function relationship with marriage consensus in 60 couples> resulted that there is a positive correlation between sexual function with marriage consensus and by improving sexual function and marriage consensus, mental and body healthy will improve (13). Results of above researches agree with this study. While Sargolzaei (2002)in his/ her study with aim of <determine of sexual mental disorders and depression in infertile women> resulted there is no relation between depression of women and sexual function disorder (24) that findings don't agree with this research. The probable cause of no agreement might be in the kind of sexual function and public healthy questionnaire as in this research public healthy questionnaire including 28 items was used but Sargolzaei used depression questionnaire of Hamilton.

Results of this research indicated, spouse accompaniment of infertile women has affected on marriage consensus and sexual function of them.

Nourani (2008) in his/ her study with title of <the comparison of sexual satisfaction in infertile and fertile women> (25) and Fouladi (2009) in a study based on<investigating infertile couples viewpoint in comparison with infertility and marriage consensus> resulted infertile women who their husbands accompanied with them during treatment and pay the money to treat very well, have better sexual and marriage satisfaction (2). Also Karami and et. al

(2014) indicated there is a relation between positive image of body with sexual function and marriage consensus (26). The mentioned findings agree with the results of this research.

CONCLUSION

In the present study majority of infertile women was under the treatments of fertility helps and they hope to fertilize, so they might hope to their future more than before and they have a good marriage consensus and sexual function. Khodakarami (2010) in a quality study with title of <life experience with infertility> indicated sometimes infertility cause to positive changes in relations of couples and also they understand each other easily, because they feel to support each other and they prefer to talk alone and interest between them prevent establishing problems. In addition, they support each other to treat and solve the problems and they understand the importance of their joint life (5). Also Fouladi (2007) in his / her studies resulted men like women interested in having child and thus they have an active role to treat infertility and this active role of them in treatment will lead to positive changes in marriage relationships (2).

Findings of this study could use to good medical and hygienic planning and policy making such as providing advisory and educational programs to medical hygienic staffs in infertile clinics and special women offices, midwifery and infertility offices, medical hygienic centers and family advisory and psychological clinics specially about infertile women who have problem in field of marriage consensus, sexual function and psychological problems related to infertility treatment.

REFERENCES

Hatami, H. RSM., Eftekhar, A. H., Majlesi, F., Sayed, N. M., Parizadeh, S. MJ. (2007). *Text Book of Public Health*. 2 ed. Tehran: Arjmand.

Fooladi. E., Danesh. MM., Kashfi. F., Khani. S., Mohammadpor. RA. (2006). Study of infertile husbands' and wives' point of view to infertility and marital adjustment in patients reffering to Royan infertility center of Tehran in 2005. *Journal of Mazandaran University of Medical Sciences*, *16*(55), 131-7.

Mohammadi, M. R., & Farahani, F. K. A. (2001). Emotional and psychological problems of infertility and strategies to overcome them.*Journal of Reproduction & Infertility*, *2*(4).

Khosravi, Z. (2002). Mental health factors in infertile couples. *Medical Journal of Reproduction & Infertility*, *3*(9):64-56.

Khodakarami, N., Hashemi, S., Seddigh, S., Hamdiyeh, M., & Taheripanah, R. (2010). Life experience with infertility; a phenomenological study. *Journal of Reproduction & Infertility*, *10*(4).

Bernstein, P. H., & Bernstein, M. T. (1999). Diagnosis and treatment marital (treatment marital). *Tehran Khadamat Farhangi Rasa*, 78-80.

Peterson, B. D., Newton, C. R., & Rosen, K. H. (2003). Examining Congruence Between Partners' Perceived Infertility-Related Stress and Its Relationship to Marital Adjustment and Depression in Infertile Couples.*Family process*, *42*(1), 59-70.

Vick, K. E. (2009). *The applicability of the Dyadic Adjustment Scale for rural marital assessment*. UNIVERSITY OF SOUTH DAKOTA.

Kolander, C. A., Ballard, D. J., & Chandler, C. K. (1999). *Contemporary women's health: issues for today and the future*. WCB/McGraw-Hill.

Mosala, N.L., & Ashkani, H. (2004). Motherhood and mental health. *Tehran: Roshan Ketab*, 234.

Legha Barazandeh, H. (2005). The relationship of Schema and communication standards inconsistent with marital Adjustment. *Mashhad: Ferdwusi*, *25*, 67-92.

MilaniFar, B. (2001). *Psycology Health*. Tehran: Ghomes, 56.

Ali Akbari, D. M. (2010). Relationship between women sexual function and marital adjustment. *Journal of behavioral Sciences*, *4*(3),199- 206.

Rosen, C. Brown, J. Heiman, S. Leiblum, C. Meston, R. Shabsigh, D. Ferguson, R. D'Agostino, R. (2000). The Female Sexual Function Index (FSFI): a multidimensional self-report instrument for the assessment of female sexual function. *Journal of Sex &Marital Therapy*, *26*(2), 191-208.

Hoseini, M., & Khadiv Zadeh, T. (2003). Effect of sex education on the couple's sexual marital satisfaction. *Mashhad, Iran: University of Medical Sience*, 4-45.

Basson, R., Leiblum, S., Brotto, L., Derogatis, L., Fourcroy, J., Fugl-Meyer, K., ... & Schover, L. (2004). Revised definitions of women's sexual dysfunction. *The journal of sexual medicine*, *1*(1), 40-48.

Parish, W. L., Luo, Y., Stolzenberg, R., Laumann, E. O., Farrer, G., & Pan, S. (2007). Sexual practices and sexual satisfaction: A population based study of Chinese urban adults. *Archives of Sexual Behavior*, *36*(1), 5-20.

Berek, JS., & Novak, E. (2007). *Berek and Novak's gynecology*. London: Lippincott Williams & Wilkins.

Latifnejad Rousari, R., Allan, H. T., & Smith, P. A. (2009). Navigating the journey of infertility: Muslim and Christian infertile women's experiences.*Religion and psychology. Guildford: Nova Science Publishers*, 224-5.

Noorbala, A. A., & Mohammad, K. (2009). The validation of general health questionnaire-28 as a psychiatric screening tool. *Hakim Research Journal*,*11*(4), 47-53.

Rahbar, N., Ghorban, R., Moazen, S., & Asl, N. S. (2010). Association between spontaneous abortion and general health condition. *Iranian Journal of Obstetrics, Gynecology and Infertility*, *13*(1), 7-12.

Salari, P., Nayebi, N. A. S., Modarres, G. M., Vahid, R. F., & Jabbari, N. H. (2012). Surveying the relationship between adult attachment style to parents with female sexual function.

Kilic, E., Taycan, O., Bell, A. K., & Özmen, M. (2007). The effect of Permanent Ostomy on Body Image, Self-Esteem, Marital Adjustment, and Sexual Funconing. *Turk Psikiyatri Derg*, *18*, 302-10.

Sargolzaee, M. R., Moharreri, F., Arshadi, H. R., Javadi, K., Karimi, S., & Fayyazi-bordbar, M. R. (2001). Psychosexual and depression disorders in infertile female referring to Mashhad Infertility Treatment Center. *Journal of Reproduction & Infertility*, *2*(4).

Nourani, S., Jonaidy, E., Shakeri, M. T., & Mokhber, N. (2009). Sexual satisfaction in fertile and infertile women attending state clinics in mashad. *Medical Journal of Reproduction & Infertility*. *10*(4),269-77.

Karamidehkordi, A., & Roudsari, R. L. (2014). Body image and its relationship with sexual function and marital adjustment in infertile women.*Iranian journal of nursing and midwifery research*, *19*(7), 51-58.